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Jung-Hwan Kim

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EXAMINER

SOL, ANTHONY M

ART UNIT

PAPER NUMBER

2616

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,279

Applicant(s)

KIM, JUNG-HWAN

Examiner

Anthony Sol

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 1/17/2006 is acknowledged.
- Claims 7, 10 and 21-23 have been amended.
- No claims have been canceled.
- No claims have been added.
- Claims 1-23 remain pending.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-11, 13-15, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,832,384 ("Balachandran") in view of U.S. Patent No. 6,212,388 B1 ("Seo").

Regarding claim 1,

Balachandran discloses an invention where a first communication network (CDMA Channels) on which a second communication communications network (Extended Channels) has been overlaid that determine which channels from among a number of available channels should be selected for transmitting information (Col. 6,

lines 24-31). Balachandran further discloses that five channel lists are generated and maintained. The first list includes each of the channels that are assigned for use by either the first or the second communications network (Col. 6, lines 44-45, 52-55). The second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA Channel List) for use by the second communications network (Col. 7, lines 18-23; claim 1 – determining whether a frequency exists on each of a CDMA Channel List and an Extended CDMA Channel List when a service frequency of a base station is changed).

Balachandran does not disclose copying a frequency allocated to the Extended CDMA Channel List to the CDMA Channel List if the frequency is determined not to exist on the CDMA Channel List and copying a frequency allocated to the CDMA Channel List to the Extended CDMA Channel List if the frequency is determined not to exist on the Extended CDMA Channel List.

Seo discloses that that the invention makes it possible for the new FA to be available apart from the previously existing FA. Seo further discloses a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Col. 6, lines 52-54; claim 1 – copying a frequency allocated to the Extended CDMA Channel List to the CDMA Channel List if the frequency is determined not to exist on the CDMA Channel List; claim 1 - copying a frequency allocated to the CDMA Channel List to the Extended CDMA Channel List if the frequency is determined not to exist on the Extended CDMA Channel List).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include the capabilities of copying a frequency allocated to a channel list to generate a new combined channel list as taught by Seo so that information can be transmitted via channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). One skilled in the art would have been motivated to combine Balachandran with Seo (collectively "Balachandran-Seo") to generate the claimed invention with a reasonable expectation of success.

3. Regarding claims 2, 4, and 11,

Balachandran-Seo discloses that the BTS transmits the combined channel list to the mobile station (Seo, col. 6, lines 57-58; claim 2 – transmitting the CDMA and Extended CDMA Channel Lists to a mobile terminal; claim 4 - transmitting the CDMA Channel List by including in the CDMA Channel List the frequency allocated to the Extended CDMA Channel List if the frequency exists on both of the CDMA and Extended CDMA Channel Lists; claim 11 – transmitting the Extended CDMA Channel List to which the frequency is copied to a mobile terminal).

4. Regarding claim 5,

Balachandran-Seo discloses that if the channel number for new FA in the new channel list is assigned as one of primary, secondary, or normal, it is determined as to whether an updated information of the channel list exists or not (Seo, col.3, lines 32-35; claim 5 - determining whether the CDMA Channel List has been changed; claim 5 - determining whether the prescribed frequency exists on the CDMA Channel List when the CDMA Channel List is determined to have been changed).

Balachandran-Seo discloses that the second list is a subset of the first list. Balachandran-Seo further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Balachandran, col. 7, lines 18-23; claim 5 – determining whether the prescribed frequency exists on the Extended CDMA Channel List when the prescribed frequency fails to exist on the CDMA Channel List).

Balachandran-Seo further discloses that a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Seo, col. 6, lines 52-54; claim 5 – copying the prescribed frequency allocated to the Extended CDMA Channel List to the CDMA Channel List when the prescribed frequency exists on the Extended CDMA Channel List).

5. Regarding claim 6,

Balachandran-Seo discloses that if the channel number for new FA in the new channel list is assigned as one of primary, secondary, or normal, it is determined as to

whether an updated information of the channel list exists or not (Seo, col.3, lines 32-35; claim 6 - determining whether the Extended CDMA Channel List has been changed; claim 6 - determining whether the prescribed frequency exists on the changed Extended CDMA Channel List).

Balachandran-Seo discloses that the second list is a subset of the first list. Balachandran-Seo further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Balachandran, col. 7, lines 18-23; claim 6 – determining whether the prescribed frequency exists on the CDMA Channel List when the prescribed frequency is determined not to exist on the Extended CDMA Channel List). It is inherent that since the second list is a subset of the first list, that changing the second list changes the first list (Claim 6 – changing items of the CDMA Channel List such that items of the Extended channel list are changed on the CDMA Channel List when the Extended CDMA Channel List is changed).

Balachandran-Seo further discloses that a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Seo, col. 6, lines 52-54; claim 6 – copying the prescribed frequency allocated to the CDMA Channel List to the Extended CDMA Channel List when the prescribed frequency exists on the CDMA Channel List).

6. Regarding claim 7,

Balachandran discloses that the second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Balachandran, col. 7, lines 18-23; claim 7 – determining whether the prescribed frequency exists on the Extended CDMA Channel List when the prescribed frequency fails to exist on the CDMA Channel List).

Balachandran does not disclose determining whether a CDMA Channel List has been changed, determining whether a prescribed frequency exists on the CDMA Channel List when the CDMA Channel List is determined to have been changed, nor copying the prescribed frequency allocated to the Extended CDMA Channel List to the CDMA Channel List when the prescribed frequency exists on the Extended CDMA Channel List.

Seo discloses that if the channel number for new FA in the new channel list (CDMA Channel List) is assigned as one of primary, secondary, or normal, it is determined as to whether an updated information of the channel list exists or not (Col.3, lines 32-35; claim 7 - determining whether a CDMA Channel List has been changed; claim 7 - determining whether a prescribed frequency exists on the CDMA Channel List when the CDMA Channel List is determined to have been changed).

Seo further discloses a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Col. 6, lines 52-54; claim 7 – copying the prescribed frequency allocated to the Extended CDMA

Channel List to the CDMA Channel List when the prescribed frequency exists on the Extended CDMA Channel List).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include the capabilities of determining whether an updated information of the channel list exists or not and the capability to combine channel list comprising all FAs as taught by Seo that information can be transmitted via channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). One skilled in the art would have been motivated to combine Balachandran with Seo (collectively "Balachandran-Seo") to generate the claimed invention with a reasonable expectation of success.

7. Regarding claims 8, 9, 13,

Balachandran-Seo discloses that the BTS transmits the combined channel list to the mobile station. The combined channel list could be either CDMA Channel List or Extended CDMA Channel List (Seo, col. 6, lines 57-58; claim 8 – transmitting the CDMA Channel Lists to which the frequency has been copied to a mobile terminal; claim 9 - transmitting the changed CDMA Channel List as is to a mobile terminal if the prescribed frequency exists on the CDMA Channel List; claim 13 – transmitting the changed Extended CDMA Channel List as is to a mobile terminal if the prescribed frequency exists on the Extended Channel List).

8. Regarding claim 10,

Balachandran discloses that the second list is a subset of the first list.

Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Col. 7, lines 18-23; claim 10 – determining whether the prescribed frequency exists on the CDMA Channel List when the prescribed frequency is determined not to exist on the Extended CDMA Channel List). It is inherent that since the second list is a subset of the first list, that changing the second list changes the first list (Claim 10 – changing items of the CDMA Channel List in a manner identical to the Extended channel if it is determined that the Extended CDMA Channel List has been changed).

Balachandran does not disclose determining whether the Extended CDMA Channel List has been changed, determining whether the prescribed frequency exists on the changed Extended CDMA Channel List, nor copying the prescribed frequency allocated to the CDMA Channel List to the Extended CDMA Channel List when the prescribed frequency exists on the CDMA Channel List

Seo discloses that if the channel number for new FA in the new channel list (Extended CDMA Channel List) is assigned as one of primary, secondary, or normal, it is determined as to whether an updated information of the channel list exists or not (Col.3, lines 32-35; claim 10 - determining whether the Extended CDMA Channel List

has been changed; claim 10 - determining whether the prescribed frequency exists on the changed Extended CDMA Channel List).

Seo further discloses a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Col. 6, lines 52-54; claim 10 – copying the prescribed frequency allocated to the CDMA Channel List to the Extended CDMA Channel List when the prescribed frequency exists on the CDMA Channel List).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include the capabilities of determining whether an updated information of the channel list exists or not and the capability to combine channel list of all FAs as taught by Seo so that information can be transmitted via channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). One skilled in the art would have been motivated to combine Balachandran with Seo (collectively “Balachandran-Seo”) to generate the claimed invention with a reasonable expectation of success.

9. Regarding claim 14,

Balachandran discloses an invention where a first communication network (CDMA Channels) on which a second communication communications network (Extended Channels) has been overlaid that determine which channels from among a

number of available channels should be selected for transmitting information (Col. 6, lines 24-31; claim 14 – transmitting each of the CDMA Channel List and the Extended CDMA Channel List to at least one mobile terminal). Balachandran further discloses that five channel lists are generated and maintained. The first list includes each of the channels that are assigned for use by either the first or the second communications network (Col. 6, lines 44-45, 52-55). The second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Col. 7, lines 18-23).

Balachandran does not disclose updating a CDMA Channel list to include a frequency allocated on an Extended CDMA Channel list nor updating the Extended CDMA Channel list to include a frequency allocated to the CDMA Channel list.

Seo discloses that that the invention makes it possible for the new FA to be available apart from the previously existing FA. Seo further discloses that a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Col. 6, lines 52-54; claim 14 – updating a CDMA Channel list to include a frequency allocated on an Extended CDMA Channel list; claim 14 - updating the Extended CDMA Channel list to include a frequency allocated to the CDMA Channel list).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include

the capabilities of updating a channel list to generate a new combined channel list as taught by Seo so that information can be transmitted via channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). One skilled in the art would have been motivated to combine Balachandran with Seo (collectively “Balachandran-Seo”) to generate the claimed invention with a reasonable expectation of success.

10. Regarding claim 15,

Balachandran-Seo discloses that the second list is a subset of the first list. Balachandran-Seo further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network. It is inherent that since the second list is a subset of the first list, that if an allocated frequency is removed from the channel list from which the allocated frequency originated, the other channel list is updated to remove the allocated frequency (Balachandran, col. 7, lines 18-23; claim 15 – If an allocated frequency is removed from the channel list from which the allocated frequency originated, the other channel list is updated to remove the allocated frequency).

11. Regarding claim 21,

Balachandran discloses an invention where a first communication network (CDMA Channels) on which a second communication communications network (Extended Channels) has been overlaid that determine which channels from among a number of available channels should be selected for transmitting information (Col. 6, lines 24-31). Balachandran further discloses that five channel lists are generated and maintained. The first list includes each of the channels that are assigned for use by either the first or the second communications network (Col. 6, lines 44-45, 52-55). The second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Col. 7, lines 18-23).

Balachandran does not disclose transmitting a Synchronization Channel Message on a Synchronization Channel in a frequency which is related to a service capability of the base station, nor transmitting a CDMA Channel List and an Extended CDMA Channel List on a Paging Channel in the frequency.

Seo discloses that the mobile station and the BTS receive/transmit the voice information and data information with each other through a traffic channel. Seo further discloses that the forward channel consists of pilot channel, synchronous channel, paging channel and access channel, which are located in the overhead channel (Col. 2, lines 11-16; claim 21 - transmitting a Synchronization Channel Message on a Synchronization Channel in a frequency which is related to a service capability of the base station).

Seo further discloses that the paging channel transmits system information, and other numerous messages in order to establish a call-setup to the mobile station. The BTS transmits all the system configuration and timing information to the mobile station. Seo further discloses that the system configuration information relating to FAs is called channel list message (Col. 2, lines 19-28; claim 21 - transmitting a channel list on a Paging Channel in the frequency).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include the capabilities of transmitting the voice and data information through a synchronous channel and the capability to transmit information relating to FAs through the paging channel so that information can be transmitted via channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). One skilled in the art would have been motivated to combine Balachandran with Seo (collectively "Balachandran-Seo") to generate the claimed invention with a reasonable expectation of success.

12. Regarding claim 22,

Balachandran-Seo discloses the mobile station selects a specific frequency to establish a communication link and to maintain the call (Seo, col.2, lines 25-26; claim 22 - the mobile station finally setting a service according to one of the CDMA Channel List and an Extended CDMA Channel List).

13. Regarding claim 23,

Balachandran-Seo discloses that the system configuration information relating to FAs is called channel list message, which contains information to determine whether the communication channel is active within that cell (Seo, col. 2, lines 27-30; claim 23 - the Extended CDMA Channel List includes an information related to the service capability of the base station which is not transmitted on Synchronization Channel).

14. Claims 3, 12, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balachandran in view of Seo, and in further view of admitted standards (IS-95, IS-95A, IS-95B, IS-2000), hereafter "Standards".

Regarding claims 3, 12, and 16,

Balachandran-Seo does not disclose that the mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal.

The applicant has admitted that the mobile stations are allocated FAs according the recommendation of IS-2000 where 1FA, 3FA, and 4FA are allocated for 2G mobile stations service and 2FA is allocated for 3G mobile station service (Application, pg. 1, para. 3; claims 3, 12 – the mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal; claim 16 – the at least one mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the mobile station of Balachandran-Seo to be one of a second generation mobile terminal and a third generation mobile terminal so that the mobile terminal reflects the current wireless communications standards. One skilled in the art would have been motivated to combine Balachandran-Seo with Standards (collectively "Balachandran-Seo-Standards") to generate the claimed invention with a reasonable expectation of success.

15. Regarding claim 17,

Balachandran discloses an invention where a first communication network (CDMA Channels) on which a second communication communications network (Extended Channels) has been overlaid that determine which channels from among a number of available channels of a base station should be selected for transmitting information (Col. 6, lines 24-31; claim 17 – a base station configured to allocate frequencies of a CDMA channel list and an Extended CDMA channel list).

Balachandran further discloses that five channel lists are generated and maintained.

The first list includes each of the channels that are assigned for use by either the first or the second communications network (Col. 6, lines 44-45, 52-55). The second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network (Col. 7, lines 18-23).

Balachandran does not disclose that at least one mobile terminal configured to receive one of the CDMA channel list and the Extended CDMA channel list is one of a second generation terminal and a third generation terminal, nor does he disclose that the base station is configured to copy frequencies allocated on the CDMA channel list to the Extended CDMA channel list, and to copy frequencies allocated on the Extended CDMA channel list to the CDMA channel list.

Seo further discloses that the invention makes it possible for the new FA to be available apart from the previously existing FA. Seo further discloses a combined channel list comprising the information of all FAs, which are presently serviceable by the BTS, including the new FA (Col. 6, lines 52-54; claim 17 – copy frequencies allocated on the CDMA channel list to the Extended CDMA channel list, and to copy frequencies allocated on the Extended CDMA channel list to the CDMA channel list).

The applicant has admitted that the mobile stations are allocated FAs according to the recommendation of IS-2000 where 1FA, 3FA, and 4FA are allocated for 2G mobile stations service and 2FA is allocated for 3G mobile station service (Application, pg. 1, para. 3; claims 3, 12 – the mobile terminal is one of a second generation mobile terminal and a third generation mobile terminal; claim 17 – the mobile type is one of a second generation terminal and a third generation terminal).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the channel lists of Balachandran to include the capabilities of copying a frequency allocated to a channel list to generate a new combined channel list as taught by Seo so that information can be transmitted via

channels from among a number of available channels by the second communications network without impacting the first communications network while achieving efficiency within the second communications network (Balachandran, Col. 6, lines 28-32). In addition, it would have been prima facie obvious to one of ordinary skill in the art at the time of the invention was made to modify the CDMA mobile telecommunications system channel lists as disclosed by Balachandran and Seo such that channel lists are received by a mobile terminal that is one of a second generation mobile terminal and a third generation mobile terminal as admitted by the applicant so that the mobile terminal reflects the current wireless communications standards. One skilled in the art would have been motivated to combine Balachandran with Seo, and further with Standards (collectively "Balachandran-Seo-Standards") to generate the claimed invention with a reasonable expectation of success.

16. Regarding claims 18 and 19,

Balachandran-Seo-Standards discloses that the second list is a subset of the first list. Balachandran-Seo further discloses that the channels currently not occupied by the first communications network (CDMA Channel List) are included in the second list (Extended CDMA List) for use by the second communications network. It is inherent that since the second list is a subset of the first list, that if an allocated frequency is removed from the channel list from which the allocated frequency originated, the other channel list is updated to remove the allocated frequency (Balachandran, col. 7, lines 18-23; claim 18 - if the Extended CDMA channel list is changed, the base station is

configured to update the CDMA channel list to reflect the change to the Extended CDMA channel list; claim 19 - if the CDMA channel list is changed, the base station is configured to update the Extended CDMA channel list to reflect the change to the CDMA channel list).

17. Regarding claim 20,

The applicant has admitted that the mobile stations are allocated FAs according the recommendation of IS-2000 where 1FA, 3FA, and 4FA are allocated for 2G mobile stations service and 2FA is allocated for 3G mobile station service (Application, pg. 1, para. 3).

Furthermore, Balachandran discloses an invention where a first communication network (CDMA Channels) on which a second communication communications network (Extended Channels) has been overlaid that determine which channels from among a number of available channels should be selected for transmitting information (Col. 6, lines 24-31). Balachandran further discloses that five channel lists are generated and maintained. The first list includes each of the channels that are assigned for use by either the first or the second communications network (Col. 6, lines 44-45, 52-55). The second list is a subset of the first list. Balachandran further discloses that the channels currently not occupied by the first communications network (2G) are included in the second list (3G) for use by the second communications network. Thus, the first communications network can use the CDMA channel list and the second network can use the Extended CDMA channel list. (Col. 7, lines 18-23; claim 20 - the 2G terminal is

configured to receive the CDMA channel list and the 3G terminal is configured to receive the Extended CDMA channel list).

Response to Arguments

18. Applicant's arguments filed 1/17/2006 regarding claims 1, 7, 10, 14, and 21 have been fully considered but they are not persuasive.

- In the Remarks on pgs. 11-14 of the Amendment, the Applicant contends that none of the cited references taken alone or in any proper combination, disclose, suggest, or render obvious the limitations in the combination of each of these claims. By way of examples, the Applicant uses the Examiners citations in the Office Action to argue that the cited portions do not disclose the claimed limitations. For example, the Applicant points out on page 11 of the Amendment, col. 7, lines 18-23 of the Balachandran reference cited by the Examiner as failing to meet the limitation – *determining whether a frequency exists on each of a CDMA channel list and an extended CDMA channel list when a service frequency of a base station is changed.*

- The Examiner respectfully disagrees. The Examiner actually cited two more portions, col. 6, lines 24-31 and col. 6, lines 44-45, 52-55, in addition to col. 7, lines 18-23 in the paragraph that rejects the limitation mentioned above. It should be noted that the Examiner cited specific columns and lines where the Examiner considers the essential elements of the limitations are addressed, so

that whole columns or even multiple pages are not cited, which would render the citations to be of limited value. The relevant element in col. 6, lines 24-31 is that a first communication network and a second communication network exist with a number of available channels in each, i.e. first and second channel lists. In other words, the first communication network's channel list can be mapped to the claimed *channel list* and the second communication's channel list can be mapped to the claimed *extended channel list*. The fact that the claimed channel lists are called **CDMA** channel lists (CDMA channel list and extended CDMA channel list) is not given weight by the Examiner because the claimed inventive steps are not the CDMA channel lists themselves but how the contents of the lists are copied from one list to the other. There are no other limitations in the claims that give these channel lists any functionality that is unique to the Applicant's CDMA channel lists or how they are generated that sets them apart from the standard CDMA channel lists. The CDMA channel list and extended CDMA channel list are defined as such per the standard IS-2000 as admitted by the Applicant on page 1, paragraph 3 of the application and is well known in the art. Therefore, the Examiner treats CDMA channel list and extended CDMA channel lists as simply first channel list and second channel list.

The Examiner, in an attempt to convey more clearly the relevance of the cited reference, has found a portion of the Balachandran reference that maps to the limitation of - *determining whether a frequency exists on the channel lists* – in col. 3, lines 6-12. Balachandran discloses a method to “determine which

channel, from a plurality of shared channels assignable to a first communications network and a second communications network, will be used next for communicating information by the second network.” Balachandran further discloses an Idle_Channel list that “includes each assignable channel that is not currently used by the either the first or second communications network” in col. 3, lines 12-13-18. In the process of creating an Idle_Channel list, the process must first determine whether a channel (frequency) is being used by either of the communications network (i.e. exists on the channel lists). In other words, the process must first *determine whether a frequency exists on the channel lists*, as claimed, before adding a channel/frequency to the Idle_Channel list. Note that Balachandran refers to the Idle_Channel list as his second list (col. 7, line 18). That is not to be confused with the Examiner’s designation of second channel list, which equates to channels assigned to the second communications network.

As for the part of the limitation that reads - *when a service frequency of a base station is changed*, Balachandran discloses in col. 3, lines 33-50 a Backoff zone, where channels used by the second communications system are released in accordance with a procedure which allows an end system and a base station of the second communications network to coordinate the channel (service frequency) change (*service frequency of a base station is changed*), and thus reestablish the Backoff zone. Thus, Balachandran does disclose or suggest - *determining whether a frequency exists on each of a CDMA channel list and an*

extended CDMA channel list when a service frequency of a base station is changed.

- The Applicant contends on page 12 of the Amendment, that the Seo at col. 6, lines 52-54 does not meet the limitations of *copying a frequency allocated to the Extended CDMA Channel List to the CDMA Channel List if the frequency is determined not to exist on the CDMA Channel List* and vice versa.

- The Examiner respectfully disagrees. As discussed above, the Examiner treats CDMA Channel List and Extended CDMA Channel List as first channel list and second channel list. Thus, the limitation can be simply interpreted as - *copying a frequency from one channel list to the other if the frequency did not already exist*. The Examiner respectfully disagrees with the Applicant and directs attention to Seo's col. 5, lines 2-9, in an attempt to further explain the Examiner's position. Seo discloses generating a first channel list having newly added FA and generating a second list comprising all FAs, including the newly added FA. In other words, the method is adding (copying) a FA (frequency) from first channel list to the second channel list, which did not already have FA. As for copying a frequency from the second channel list to the first channel list, it is a matter of designating which list is first or second since the claimed channel lists do not distinguish themselves from the other aside from the label attached to them – *CDMA Channel List and Extended Channel List*. Thus, Seo does

disclose or suggest - *copying a frequency allocated to the Extended CDMA Channel List to the CDMA Channel List if the frequency is determined not to exist on the CDMA Channel List and vice versa.*

- The Applicant further contends on page 13 of the Amendment that Seo in col. 3, lines 32-35 does not disclose *determining whether a CDMA channel list has been changed*. The Applicant also contends on page 13 of the Amendment that the lists in Seo is not CDMA channel list.

- The Examiner respectfully disagrees. In light of the discussion above, the limitation can be simply interpreted as – *determining whether a channel list has been changed*. The fact that the new FA is in the new channel list suggests that the list has been changed. Thus, Seo does disclose or suggest - *determining whether a CDMA channel list has been changed*. As for the contention that the lists in Seo is not CDMA channel list. The Examiner respectfully disagrees. Seo discloses system configuration information relating to FAs that is “called channel list message (CDMA_CH_LIST)” (col. 2, lines 27-28). Thus, Seo discloses *determining whether a CDMA channel list has been changed*.

- The Applicant still further contends on page 13 of the Amendment that Seo’s col. 2, lines 11-16 does not disclose or suggest *transmitting*

synchronization channel message in a frequency related to the service capability of the base station.

- The Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the Examiner broadly interpreted synchronization channel message as any message using the synchronous channel. Seo discloses that in the CDMA cellular system, the mobile station and the BTS first receive/*transmit* data from each other via the overhead channel (col. 2, lines 17-19). Seo further discloses that the forward channel consists of among others a *synchronous channel*, which is located in the *overhead channel* (col. 2, lines 13-16). Thus, Seo does disclose *transmitting a synchronous channel message*. As for transmitting the message in a *frequency related to the service capability of the base station*. Again, the Examiner did not read limitations from the specifications into the claims. Seo discloses BTS transmits all the system configuration and timing information (timing suggest synchronization) to the mobile station, and based on this information, the mobile station selects a specific frequency to establish a communication link (col. 2, lines 23-26). Thus, in order for the mobile station to receive the information, it must be transmitted in a frequency related to the service capability of the base

station. Thus, Seo does disclose or suggest *transmitting synchronization channel message in a frequency related to the service capability of the base station*.

- The Applicant still further contends on page 14 of the Amendment that Seo's col. 2, lines 19-28 do not disclose or suggest the limitation – *transmitting a CDMA channel list and an extended CDMA channel list on a paging channel*.
- The Examiner respectfully disagrees. Again, it is noted as discussed above, that the Examiner treated CDMA channel list and extended channel list as first and second channel lists. Seo discloses that the paging channel transmits system information relating to FAs called channel list message and that the channel list message can be transmitted periodically, or instantaneously whenever a new FA is added or deleted (suggesting channel lists)(col. 2, lines 19-32). Since a channel list containing a new FA is created and transmitted to the mobile station, it suggests an existence of at least a first channel list and a second channel list. Thus, Seo discloses or at least suggests *transmitting first channel list and a second channel list*.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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